SONY

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VAIO

# VGN-CS31Z/Q

## Express Your Style

Your stylish multimedia companion with Blu-ray Disc™ Combo Drive in Liquorice Black

VAIO Europe official website
http://www.vaio.eu/

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http://www.vaiopro.eu/

## KEY FEATURES

- 14.1" X-black LCD for sharp images and vivid colours
- Blu-ray Disc™ Combo Drive (reader) for watching HD movies on the go
- Enjoy multimedia with video chat webcam, AV touch controls and interactive features
- Efficient Intel® processor technology with powerful NVIDIA® graphics

## TECHNICAL SPECIFICATIONS

### Operating System

| | |
|---|---|
| Operating System | Genuine Windows Vista® Home Premium |
| Microsoft® Windows® Service Pack | 1 |

### Architecture

| | |
|---|---|
| Platform | Intel® Centrino® processor technology |
| Chipset | Mobile Intel® PM45 Express Chipset |

### Colour

| | |
|---|---|
| Cover colour | Liquorice Black |

## CPU Section

| | |
|---|---|
| Processor Name | Intel® Core™2 Duo Processor T6500, Supports Enhanced Intel SpeedStep® Technology |
| Processor Manufacturer | Intel® |
| Processor Speed (GHz) | 2.1 |
| L2 Cache (MB) | 2 |
| Frontside Bus (MHz) | 800 |
| Number of Cores | 2 |

## Memory

| | |
|---|---|
| Memory Size (GB) | 4 |
| Memory Speed (MHz) | 800 |
| Memory Type | DDR2 SDRAM (2x2GB) |
| Max. Supported Memory (GB) | 8 |
| Max Memory Comment | A portion of the system memory over 3GB may not be available to the 32bit operating system |

## Drives

| | |
|---|---|
| Hard Drive Capacity (GB) | 320 |
| Hard Drive Type | Serial ATA |
| Hard Drive Speed (rpm) | 5400 |
| Optical Drive Type | Blu-ray Disc™ Combo Drive (reader): BD-ROM/ DVD+-RW/+-R DL/RAM Drive |
| Optical Drive Fitting | Built-in |

## Drives Speed

| | |
|---|---|
| Write | CD-R x24, CD-RW x16, DVD-R DL x4, DVD-R x8, DVD-RW x6, DVD+R DL x4, DVD+R x8, DVD+RW x8, DVD-RAM x5 |
| Read | CD-ROM x24, CD-R x24, CD-RW x24, DVD x8, DVD-R DL x6, DVD-R x8, DVD-RW x6, DVD +R DL x6, DVD+R x8, DVD+RW x6, DVD-RAM x5, BD-ROM x4, BD-Rx4, BD-RE x2, BD-RE DL x2, BD-R DL x2 |

## Display

| | |
|---|---|
| Screen Type | X-black LCD |
| Diagonal Size (in) | 14.1 |
| Resolution | 1280 x 800 |
| Aspect Ratio | 16:10 |
| Resolution Type | WXGA |

## Graphics

| | |
|---|---|
| Graphic Card Name | NVIDIA® GeForce® 9300M GS GPU |
| Total Graphics Memory | Total available graphics memory of Approx.1510 MB with dedicated Video Memory of 256MB |
| Comments | * Total Available Graphics Memory refers to the Windows Vista® classification of graphics memory, which varies depending on the operating condition, version of device driver and system memory size |

## Interfaces

| | |
|---|---|
| 4 Pin i.LINK™ (IEEE1394), 400 Mbps | 1 |
| DC in | 1 |
| Memory Stick™ Slot | 1 |
| Memory Stick™ Slot Type | Memory Stick™ Std / Duo, Memory Stick™ PRO Std / Duo, high speed data transfer |
| SD Card Slot | 1 |
| Audio out | 1 |
| Audio out Type(s) | Stereo Headphones/Speakers Jack |
| Microphone Jack (Stereo) | 1 |
| RJ-11 Direct Port (Modem) | 1 |
| RJ-45 Direct Port (Network) | 1 |
| USB Speed | High/Full/Low |
| USB Port (quantity) | 3 |
| USB Version | 2.0 |
| USB Connector Type | A |
| VGA Connector for Monitor | 1 |
| Express Card Slot | 1 |
| Express Card Slot Type | 34mm |

## Connectivity

| | |
|---|---|
| Built-in Modem | V.92/V.90 |
| Integrated Wireless LAN | YES |
| Wireless LAN Max. Date Rate (Mbps) | 300 (RX)/ 150 (TX) |
| Wireless LAN Range (m) | max. 100 |
| Wireless LAN Type | 802.11a/b/g/Draft n |
| Integrated Bluetooth (Version) | 2.1 + EDR |
| Bluetooth Range (m) | 10 |
| Ethernet network | 100 BASE-TX/10 BASE-T |

## Multimedia

| | |
|---|---|
| Intel® High Definition Audio compatible | YES |
| Built-in Stereo Speakers | YES |
| Windows® Sound System Compatible | YES |

## Built-in Camera

| | |
|---|---|
| Built-in 'Motion Eye' Digital Camera | YES |
| Frames per Second | max. 30 |
| Image Sensor (Mega Pixels) | 1.3 |
| Motion Picture Function | YES |
| Motion Pictures max. Resolution (pixels) | 1280x1024 (SXGA) |

## Keyboard Section

| | |
|---|---|
| Touch Pad | 1 |

## Features

| | |
|---|---|
| Special Buttons | Power button, Wireless switch, AV buttons, AV Mode, Capture |
| Auto Resolution | Plug and Display |
| Built-in Microphone | YES |
| Kensigton Lock | YES |

## Software

| | |
|---|---|
| Solution Guide | Me & My VAIO |
| Audio | VAIO Music Box, Windows Media Player 11, SonicStage Mastering Studio 2.4 |
| Video & TV | Picture Motion Browser,VAIO Content Importer / Exporter, WinDVD BD 8 for VAIO, DivX Player & Converter,VAIO Movie Story |
| Photo | Adobe Photoshop Elements 7, Picture Motion Browser, VAIO Movie Story |
| CD-DVD Burning | Easy Media Creator 10, Click to Disc/Editor |
| Home Network | VAIO Media Plus |
| Office Application | Adobe® Reader® 9, Adobe Standard 9, Microsoft® Office Trial 2007 (60 days Try & Buy) |
| Security & Other | McAfee® Internet Security Suite (with 60 days free virus update), VAIO Recovery Utility 2.6 - HDD recovery (hidden partition), Google software package |

## Supplied Accessories

| | |
|---|---|
| AC Adaptor | YES |
| Battery | YES |
| Power Cord | YES |

## Dimensions

| | |
|---|---|
| Depth Main Unit (mm) | 245 |
| Height Main Unit (min - max in mm) | 29 - 39.8 |
| Width Main Unit (mm) | 335.8 |
| Weight with Supplied Battery and Supplied Drive (kg) | 2.6 |

## Battery

| | |
|---|---|
| Battery Type | Lithium-Ion battery (VGP-BPS13/S) |
| Battery Life (min) | 160 |
| Battery Charging Time (min) | 210 |
| Battery Life Disclaimer | Actual battery life will vary depending on your specific hardware and software configurations. Benchmark: MobileMark 2007 |

## Guarantee

| | |
|---|---|
| Months | 12 |

# OPTIONAL ACCESSORIES

VGP-MBL20/F

Ladies Tote Bag

VGP-BPS13A/S

Battery Pack for FW series

VGP-AC19V32

AC Adapter

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